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The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 20

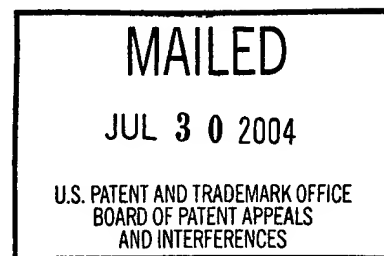
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Ex parte JAY PAUL WHITE

Appeal No. 2002-1861  
Application 09/338,744<sup>1</sup>

ON BRIEF



Before THOMAS, HAIRSTON, and BARRETT, Administrative Patent Judges.

BARRETT, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134(a) from the final rejection of claims 9, 22, and 25-35.

We affirm.

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<sup>1</sup> Application for patent filed June 23, 1999, entitled "Global Positioning Systems Applications," which is continuation of Application 08/624,818, filed March 27, 1996, now abandoned.

BACKGROUND

The invention relates to a method for storing items in a storage facility using a global positioning system (GPS) transceiver and a bar code reader (claim 19) and a portable device for use in such a storage facility (claim 33).

Claim 19 is reproduced below.

19. A method for storing items in a storage facility, wherein the storage facility is a warehouse or other facility in which the items are stored in defined storage locations such as shelves or bins, the method comprising:

determining the location at which an item is to be stored by recording a GPS signal received by a transceiver positioned at the location;

processing the GPS signal to determine the storage location;

determining the identity of the item from scanning a symbol associated with the item; and

associating the storage location and identity in a database.

THE REFERENCES

The examiner relies on the following references:

Loomis et al. (Loomis)	5,563,607	October 8, 1996 (filed May 26, 1994)
Hertel	5,751,246	May 12, 1998 (filed May 20, 1996)

Although not argued by appellant, it is noted that Hertel is not prior art because it has a filing date after the filing date of parent Application 08/624,818 of the present application. Hertel is a continuation-in-part of Application 08/416,186, filed April 4, 1995, now U.S. Patent 5,532,690; however, this earlier

Appeal No. 2002-1861  
Application 09/338,744

application does not provide support for the portions of Hertel relied upon by the examiner.

#### THE REJECTION

Claims 19, 22, and 25-35 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Loomis and Hertel. Since Hertel is not prior art, the question remains whether the claims are unpatentable over Loomis alone. We do not refer to the portions of the rejection or arguments relating to Hertel.

We refer to the second Office action (Paper No. 7), the final rejection (Paper No. 10) and the examiner's answer (Paper No. 15) (pages referred to as "EA\_\_") for a statement of the examiner's rejection, and to the appeal brief (Paper No. 14) (pages referred to as "Br\_\_") and reply brief (Paper No. 16) (pages referred to as "RBr\_\_") for a statement of appellant's arguments thereagainst.

#### OPINION

##### Content of the reference

Loomis discloses a differential GPS (DGPS) system for precise time and/or location timing of an event. Ordinary GPS is subject to an intentional error introduced by the U.S. Department of Defense (col. 1, lines 13-42). DGPS uses a base station receiver accurately placed at a known location to provide a static reference and transmits error corrections to other GPS roving receivers in the area (col. 1, lines 43-58). The time it

takes for the stationary GPS receiver to compute the error-correction data and the additional time needed to transmit the error-correction message is the "latency" (col. 2, lines 33-41). Communication channels with significant delay have long latency times that increase the position error (col. 2, lines 41-48). In jobs that do not require "real time" corrections, the roving receiver records each measured position and the exact time it made the measurement and this data is later merged with the corrections recorded at the reference receiver, which is known as "post-processed" DGPS (col. 2, lines 56-62). Loomis describes a post-processed DGPS system where a roving unit (rover) stores uncorrected GPS fix data and the time of fix, and transmits a demand for error correction data to a reference station, where the demand preferably includes a time stamp indicating the time of fix. The base station replies with error-correction data valid at the time of fix and the rover uses the received error-correction data to compute an accurate differentially-corrected fix (col. 3, lines 51-66). Loomis discloses that "the portable rover unit of the present invention can be used, for example, for tagging an article or location with or without ... identifying data (such as an asset identification number)" (col. 7, lines 7-11). Loomis discloses that the rover unit can record data from an optional external unit (col. 7, lines 42-48):

The operator of the rover unit first connects the unit to any optional external unit. The external unit may provide a

Appeal No. 2002-1861  
Application 09/338,744

data input to be included with the time and location tag or may receive a data output of the time-and-location tag. The optional external unit can be a measuring instrument or bar-code reader or portable computer, for example.

A disclosed application for the invention is asset management (col. 8, lines 28-31):

Asset management. A customer assigns an asset code to each piece of equipment, and uses the system to locate it all and create data for asset management, inventory management, logistics and asset tracking systems.

Claims 19, 22, and 25-32

The examiner finds that Loomis teaches a GPS device used for asset management, inventory management, logistics and asset tracking systems of items, which is used in combination with a bar code reader, but does not expressly teach that "the items are stored in defined storage locations such as shelves or bins," as stated in the preamble, and "associating the storage location and identity in a database." The examiner reasons, however, that since the GPS device and connected bar code reader are used in asset management, inventory management, logistics and asset tracking, it would have been obvious to one skilled in the art that the storage location and the tagged article identity must be associated in a database (Paper No. 7, p. 3). The examiner states that it would have been obvious to one of ordinary skill in the art that Loomis "would have worked just the same whether the storage facility has or lacks defined storage locations such as shelves or bins" (Paper No. 7, p. 4).

Appeal No. 2002-1861  
Application 09/338,744

Appellant first argues that "Loomis teaches nothing that would suggest applying its GPS methods to a warehouse or other storage facility in which items are stored in defined storage locations" (Br3). It is acknowledged that Loomis suggests applying GPS techniques to "asset management" and specifically to "inventory management" and "asset tracking systems," but not in a warehouse in which items are stored in defined storage locations (Br3). "Rather, what Loomis is referring to is the very different and general problem of recording the locations of assets that are stored in undefined storage locations, e.g., the random locations in which manufacturing hardware or office equipment are found through a company's buildings" (Br3).

The examiner reasons that "Loomis teaches that the assets could be located at any location, whether it be 'defined storage locations' or 'undefined storage locations'" (EA4) because the articles to be monitored have to be somewhere in the building.

Appellant responds that Loomis only suggests using GPS for asset management, and that "it is not accurate for the examiner to say that Loomis teaches that assets could be located at defined storage locations" (RBr2). It is argued that what "could be" done is not the test (RBr2).

Initially, we interpret the preamble limitation, "wherein the storage facility is a warehouse or other facility in which the items are stored in defined storage locations such as shelves

Appeal No. 2002-1861  
Application 09/338,744

or bins," as not entitled to patentable weight because it is not referred back to or relied on in the body of the claim. The body of claim 19 does not refer to defined storage locations.

Nevertheless, assuming that the preamble is a claim limitation, we conclude that the claimed subject matter as a whole would have been obvious over Loomis. The examiner was very careful not to say that Loomis expressly teaches items stored in defined storage locations. Instead, Loomis is a general teaching of determining and recording the location of assets, no matter whether the assets are located in defined or undefined storage locations.

Appellant provides no support for the assertion that Loomis is referring only to undefined storage locations. We agree with the examiner that it would have been obvious to one of ordinary skill in the art that Loomis applies to locating items in any storage location, whether defined or undefined. Further, in our opinion, the fact that the invention in Loomis is used for asset management, inventory management, and asset tracking strongly suggests to one of ordinary skill in the asset and inventory management art that the assets and inventory are stored in defined locations, because this is the way items are normally stored; i.e., inventory and tracking require identification of where items are located in addition to a record of the items present. Moreover, the language of claim 19 is extremely broad: the identification of a piece of office equipment as located in a

particular room of a building would meet the preamble limitation of a "storage facility ... in which the items are stored in defined storage locations." We note that appellant's claims do not require any correlation of the defined storage locations with the corresponding GPS spatial coordinates.

Appellant argues that a "second shortcoming of Loomis is that it fails to teach the use of a bar code scanner for the purpose required in claim 19 (to determine the identity of the item being stored)" (Br3). It is argued that the description of a bar code scanner in Loomis is extremely vague and the mention at column 7, line 47 is unclear what its function is (Br3-4). It is argued that the reference to "tagging" a location or article at column 7 must refer to time tagging for use in DGPS (Br4).

The examiner finds that Loomis clearly teaches that a bar code reader could be incorporated in the GPS system at column 7, lines 42-47 (EA4) and Loomis states that the identity of the item as well as the location of the item would be tagged at column 7, lines 7-15 and 42-47 (EA5).

Appellant responds that it is not disputed that Loomis teaches the use of a bar code scanner connected to a GPS unit, but disputes that Loomis teaches the use of a bar code scanner for the purpose required in the claims, such as "determining the identity of the item from scanning a symbol associated with the item" in claim 1 (RBr2).



Appeal No. 2002-1861  
Application 09/338,744

There is no disagreement that Loomis expressly teaches the combination of a GPS unit and a bar code reader at column 7, lines 42-47. Although not expressly discussed by Loomis, it was well known to those of ordinary skill in the art that the purpose of a bar code reader is to scan a bar code symbol associated with the item to determine its identity. We find it incredible that appellant, whose assignee is the largest maker of bar code readers in the world, argues that the purpose of the bar code reader is not for "determining the identity of the item from scanning a symbol associated with the item." What else would the bar code reader be used for? Furthermore, Loomis discusses storing "identifying data (such as an asset identification number)" (col. 7, lines 10-11) and using the invention for asset and inventory management (col. 8, lines 28-31), which taken together with the disclosure of a bar code reader (col. 7, lines 42-48), suggests the use of bar codes for identification of the item in association with the GPS location information for use in asset management. References must be read as a whole.

Appellant argues that a "third shortcoming of Loomis is that it teaches nothing about associating in a database the GPS position information and the item identification information obtained from bar code scanning" (Br4). It is argued that the examiner's statement that using a database with the system of

Loomis would be necessary or obvious is without the slightest support (Br4).

The examiner finds that Loomis states that the information of the tagged item is "stored" in a memory device of a processor, referring to Fig. 6, column 7, lines 13-15 and 42-47 (EA5). The examiner states that since the information would include data from the bar code reader, the processor would store the GPS information and identifying data, and therefore Loomis does teach a database (EA5).

Appellant responds that while Loomis teaches that the item identity is combined with GPS time and location data, the examiner incorrectly assumes, without support in the reference, that item identity is determined using a bar code scanner (RBr3). It is argued that the reference to a bar code scanner comes after the teaching of combining item identity with GPS time and location data (RBr3).

One of ordinary skill in the art would read Loomis as a whole. Loomis discusses storing "identifying data (such as an asset identification number)" (col. 7, lines 10-11) and using the invention for asset and inventory management (col. 8, lines 28-31), which taken together with the disclosure of a bar code reader (col. 7, lines 42-48), suggests the use of bar codes for identification of the item for use in asset management. As previously noted, it was well known in the bar code reader art

that the purpose of a bar code reader is to scan a symbol associated with an item for the purpose of determining the identity of the item. Loomis teaches that "[a] customer assigns an asset code to each piece of equipment, and uses the system to locate it all and create data for asset management, inventory management, logistics and asset tracking systems" (col. 8, lines 28-31), which teaches that the system stores the asset code (identity of the item) and storage location for all pieces of equipment for asset management; such a system requires a database even though the term "database" does not expressly appear.

Appellant argues that "the combination of using GPS to record position at the time of storage, and bar code scanning to record identity, was new and not obvious" (Br4).

The examiner notes that Loomis teaches a bar code reader connected to a GPS device and expressly teaches that the GPS unit "stores the necessary fix data (along with any other data of interest, such as an instrument reading or identification of an article tagged)" (col. 7, lines 13-16) and the data included with the time and location tag may be data from a bar code reader (col. 7, lines 42-47) (EA6). Thus, Loomis teaches recording both GPS location and bar code scanning identity information (EA6).

We conclude that the examiner has established a prima facie case of obviousness over Loomis alone. The rejection of claims 19, 22, and 25-32 is sustained.

Appeal No. 2002-1861  
Application 09/338,744

Claims 33-35

Appellant argues that "[n]either Loomis nor Hertel teach combining in the same device both a GPS transceiver capable of determining the location at which an item is to be stored and a bar code scanner for determining the identity of the item to be stored" (Br4). It is argued that the examiner's reliance of a bar code scanner in Loomis is not persuasive because "the disclosure in Loomis is so vague that it cannot be ascertained whether the bar code scanner is combined in the same portable device with the GPS receiver, nor whether the bar code scanner is used to identify the item being stored" (Br5).

These arguments are not persuasive for the reasons discussed in connection with the rejection of claim 19. It is noted that the preamble limitation is not entitled to patentable weight since it is a mere statement of intended use for the device. Loomis expressly teaches the combination of a GPS transceiver and a bar code reader. The rejection of claims 33-35 is sustained.

Appeal No. 2002-1861  
Application 09/338,744

## CONCLUSION

The rejection of claims 9, 22, and 25-35 is sustained.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

JAMES D. THOMAS  
Administrative Patent Judge

KENNETH W. HAIRSTON  
Administrative Patent Judge

LEE E. BARRETT  
Administrative Patent Judge

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Appeal No. 2002-1861  
Application 09/338,744

FISH & RICHARDSON PC  
225 FRANKLIN ST  
BOSTON, MA 02110